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REMARKS

Claim 1, *inter alia*, calls for a decoder with a constellation mapper circuit "to determine two constellation points that are proximate a received symbol".

The final rejection refers to Figure 6 and its teachings of identifying "the constellational levels that include the received signal 114". *See*, for example, column 11, lines 15-20.

Referring to Figure 2 of the cited reference, each constellation 42, 44, or 46 includes a number of different amplitudes and indices. Thus, the reference is interested in constellation levels which correspond, at least in some respects, to amplitudes.

There is no indication that the mapper in the cited reference determines two constellation points that are proximate to a received signal. Instead, the reference simply identifies constellation levels. The mapper generates the decoded signal by mapping received signals into a plurality of distinct ranges corresponding to amplitudes. *See* column 9, lines 30-40. Thus, it is not seen where any constellation points are used, much less two constellation points, and there is no identification of two constellation points that are proximate to a received signal.

In response, in paragraph 4, on page 3, it is stated that the reference in Figure 6 teaches constellation mapping. But this is more general than what is claimed. Further, it is stated that it identifies if the received signal is in the first, second, or third constellation level. But again, this is not what is claimed. The office action goes on to indicate that each level includes more than one constellation point associated with the amplitude. But even if the level includes a plurality of points, the reference does not teach identifying two of the points that are proximate to a received signal.

For example, if I told someone, "There is a deer in the forest, over there in that clump of trees," I did not identify the two trees closest to the deer; I just identified the clump of trees. Even assuming the operation posited in the office action, it cannot meet the claimed invention.

The conclusion drawn by mapping the received signal into the first through n th distinct range includes identification of the received signal in the first, second, and third constellation levels as reading on determining two constellation points that are proximate the received signal does not bear out. There are numerous constellation points in a level, according to the examiner's analysis, and the reference does not find two constellation points that are proximate to the received signal. Therefore, the reference fails to meet the claimed limitations. Not only does it

not identify the two points that are proximate to a received signal, it does not identify or determine any points.

Claim 2 in particular calls for the two constellation points to be the nearest two points. Plainly, the reference cannot be interpreted to meet this limitation.

Here, the examiner seems to agree with the applicant's previous attorney that the reference teaches determining a minimum distance between constellation points. Still, the examiner contends that somehow this determines finding the nearest constellation points to a received symbol. It seems that that would be analogous to saying that in that bunch of trees, there are two trees that are only two feet apart, but it does not tell me anything about which trees are closest to the deer. In other words, how close the points are to one another does not tell you anything about how close they are to the received symbol.


It is respectfully requested that both the rejections of claim 1 and claim 2 be reconsidered.

While it is noted that there are also many other differences between the claims and the cited references, it is believed that compact prosecution favors focusing on this one limited issue. It is respectfully submitted that no office action to date has truly faced these problems with the rejection. While the undersigned apologizes for the tone of the previous response, the point still seems to be that it is very difficult to see how the elements are really set forth in the reference.

On the same basis, reconsideration of claim 15 would be appropriate. Likewise, reconsideration of the rejection of claim 20 is requested on the same basis as claim 1.

Respectfully submitted,

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